

return to the first, and by consequence there go out of the Glass to the Chart, and form upon it the white Spot of Light in the center of the Rings. For the reason holds good in all sorts of rays, and therefore all sorts must go out promiscuously to that Spot, and by their mixture cause it to be white. But the intervals of the fits of those rays which are reflected more obliquely than they enter, must be greater after reflexion than before by the 15th and 20th Prop. And thence it may happen that the rays at their return to the first surface, may in certain obliquities be in fits of easy reflexion, and return back to the Quick-silver, and in other intermediate obliquities be again in fits of easy transmission, and so go out to the Chart, and paint on it the Rings of Colours about the white Spot. And because the intervals of the fits at equal obliquities are greater and fewer in the less refrangible rays, and less and more numerous in the more refrangible, therefore the less refrangible at equal obliquities shall make fewer Rings than the more refrangible, and the Rings made by those shall be larger than the like number of Rings made by these; that is, the red Rings shall be larger than the yellow, the yellow than the green, the green than the blue, and the blue than the violet, as they were really found to be in the 5th Observation. And therefore the first Ring of all Colours encompassing the white Spot of Light shall be red without and violet within, and yellow, and green, and blue in the middle, as it was found in the second Observation; and these Colours in the second Ring, and those that follow shall be more expanded till they spread into one another, and blend one another by interfering.

These

These seem to be general, and this principle holds for the Glass, and the proportions of the rings by computation.

I measured the thickness of a convex plate of Glass, which was an Inch precisely. The first Part of this experiment was to observe the brightest Light of the spectrum, when its thickness was an Inch, and by the 10th Proposition to find the thickness of the plate of Glass that would produce the same refraction to the same thickness is the thickness of the plate of Glass, supposing the fines of the spectrum to be doubled it to the second Ring, if the thickness be doubled, and so on, the thickness being in its fits of transmission, the thickness be multiplied by the same Inch it transmits the same Ring. Suppose the light is admitted perpendicularly to the Glass through the center of the spectrum by a rule in the first Book, and